

TDB-ACC-NO: NN960561

DISCLOSURE TITLE: Brokerless Object Network

PUBLICATION-DATA: IBM Technical Disclosure Bulletin, May 1996, US

VOLUME NUMBER: 39

ISSUE NUMBER: 5

PAGE NUMBER: 61 - 62

PUBLICATION-DATE: May 1, 1996 (19960501)

CROSS REFERENCE: 0018-8689-39-5-61

DISCLOSURE TEXT:

Disclosed is a structure for an object network without a centralized Object Request Broker (ORB) as defined by the Common Object Request Broker Architecture (CORBA). A mechanism for a brokerless distributed object structure is disclosed. A network routing architecture consisting of tokens, such as International Business Machines' Token Ring Network, can be implemented where a network request contains a message for a particular object. If object A wants to send a message to object B without knowing object B's location, the message is embedded in a request and sent on the ring to the next node on the network. The node attempts to load the object specified. If the load is successful, the message is stripped off the ring and the object responds to the message. This enables the two objects to communicate, since the location of both objects is now known. If the object load is unsuccessful, due to the specified object not being found, the implication is that the node doesn't contain the object, and the message is forwarded to the next node. If the message is returned to the node containing object A, this is equivalent to object non-existence, in which case object A pursues some kind of error recovery. This mechanism is not limited to ring topologies. For point to point or multipoint topologies, a header associated with the request would contain a list of nodes traversed so that the same node would not receive another request unless retransmission is required or requested. If all network nodes have been traversed, the packet containing the original message and the header is to be sent back to the originator which indicates a failure to locate the object.

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